

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS

PERMITTEE

Dixon Correctional Center
Attn: Randy Blackburn
2600 North Briton
Dixon, Illinois 61021

Application No.: 73040535

I.D. No.: 103020AAD

Applicant's Designation: DIXON CC

Date Received: May 12, 2005

Subject: Boilers

Date Issued:

Expiration Date:

Location: 2600 North Briton, Dixon

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of three natural gas-fired boilers, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of nitrogen oxides (NO_x) from this facility to less than 100 tons/year, as further described in Attachment A. As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes the current permit(s) issued for this location.
- 2a. The three (3) 82.5 mmBtu/hour natural gas boilers are subject to a New Source Performance Standard (NSPS) for Small Industrial, Commercial, and Industrial Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering HSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times the Permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).
- c. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.
3. Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

- 4a. Operation of the three boilers shall not exceed the following limits:

Total Combined Natural Gas Usage: 65 mmft³/month not to exceed 246 mmft³/year.

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
- c. Emissions from the three boilers when firing natural gas shall not exceed the following limits:

<u>Pollutant</u>	<u>Fuel Usage (mmft³/Year)</u>	<u>Emission Factor (Lb/mmft³)</u>	<u>Emissions (Tons/Year)</u>
NO _x	246	100	12.3
CO	246	84	10.3
VOM	246	5.5	0.7
SO ₂	246	0.6	0.07
PM	246	7.6	0.93
		Total	24.3

This table defines the potential emissions of the three boilers and are based on the combustion of only natural gas, standard emission factors and maximum annual fuel usage.

Note: mm = Million

- d. Compliance with annual limits immediately following the issuance date of this permit shall be determined using available data from the previous months.
5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
6. The Permittee shall maintain records of the following items:
- Natural gas usage for the three (3) boilers (ft³/month and ft³/year); and
 - Monthly and annual emission of NO_x, CO, PM, SO₂, and VOM with supporting calculations (ton/mo and ton/yr).
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

If you have any questions on this, please call George Kennedy at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:GMK:psj

cc: IEPA, FOS Region 2
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the Dixon Correctional Center operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons per year of NO_x and SO₂), at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

E M I S S I O N S (Tons/Year)						Single	Combined
<u>Equipment</u>	<u>NO_x</u>	<u>CO</u>	<u>VOM</u>	<u>SO₂</u>	<u>PM</u>	<u>HAP</u>	<u>HAPs</u>
3 Boilers	<u>12.3</u>	<u>10.3</u>	<u>0.7</u>	<u>0.07</u>	<u>0.93</u>		
Totals	<u>12.3</u>	<u>10.3</u>	<u>0.7</u>	<u>0.07</u>	<u>0.93</u>	< 10	< 25

DES:GMK:psj